





## Opinions divide over FE control

by David Walker

Divergent views on the future of local authority control of further education were revealed last week by two of the leading lights of local government.

Mr Leonard Brown, retiring education officer of the Association of County Councils, said in a far-reaching address that no hard and fast line could be drawn between one part of education and another, whether between junior and infant, or after the compulsory school leaving age or further and higher. He warned that taking one place of the local government education structure into control or regional control would lead to the collapse of the whole.

However, Dame Kathleen Ollerenshaw, former Lord Mayor of Manchester and a member of the Layfield Committee on local government finance, told the standing conference of regional education councils that removing higher education from local government control could be the salvation of the rest of the system. The future of the polytechnics lay with elected regional bodies, she said. This division over the doctrine of education as a "seamless robe" anticipates the debates likely to take place in the Government's committee of inquiry into the management of further education announced in July by Mr Mulley, former Secretary for Education.

It will attempt to answer whether the polytechnics and institutes of higher education belong under the control of the local authorities or should be removed to some new regional committees or even placed under direct Whitehall control. A report was initially expected by spring next year, but the first meeting of the committee has been delayed.

The constituent members of the Council of Local Education Authorities and the ACC have argued they each need at least five representatives on the committee, so as to include the opinion of officers and members belonging to both majority and minority political parties. The DES wanted to keep the size of the committee small and would countenance a large committee only if there was an understanding that an "inner group" would do the real work.

Much of the impetus behind the committee came from Mr Fowler, the Minister of State for Education until last Friday. It remains to be seen whether his successor will give a similar brief. When the committee finally gets under way—invitations to its first meeting have yet to be sent out—the clash of views between Dame Kathleen and Mr Brown will be amplified.

Dame Kathleen, who has been active in educational politics in Manchester for many years, warned that the complexities of local government finance could make the future of education as a locally controlled service precarious. It would not take much to drive education out of local government, she said. "If when local government was reorganized the polytechnics had been taken out and given to regional bodies, it would have been dead simple. But now we have a pooling system that is just not acceptable. It no longer stands up." Rationalization of further education provision

was urgently needed. But Dame Kathleen warned against regional control by officers. The remain accountable to the public and elected councillors.

She said educationists in local authorities had been too keen in the past to cultivate their own gardens and avoid the hard world of finance. Too few of them had bothered to sit on the finance or general purpose committees of local authorities. Now they faced the danger of their service going the way of the National Health Service with centrally appointed boards running the show.

Mr Brown expressed pessimism about the future of local education, too. But to transfer control to the centre would involve the loss of freedom and cost much more. Regional control would involve loss of contact and less sensitivity to the needs of particular small areas.

The outlook was bleak. The money provided in the rate support grant for this year was probably insufficient to pay the teachers' salaries. Teachers would not be sacked, he predicted, but less than 5,000 of the 30,000 graduating from next year could expect to find jobs. The retention of control over the polytechnics by the local authorities was a matter of practicality, not theory. Their removal would be the beginning of the end for local education and perhaps eventually for local government itself, Mr Brown said.

Mr Gordon Cunningham, at present chief education officer of Cambridgeshire, takes over from Mr Brown in a fortnight. Mr Cunningham taught on Tyneside before becoming an educational administrator.

## Sussex statistician to be new v-c at La Trobe

by Peter Wilby

Professor John Scott, pro-vice-chancellor and professor of applied statistics at Sussex University, is to be the next vice-chancellor of La Trobe University, Victoria, Australia.

Educated at Trinity College, Cambridge, Professor Scott began his academic career as a research assistant at the University of Sheffield and became assistant lecturer at Aberdeen in 1953. He was lecturer in the unit of biometry at Oxford from 1955 to 1965, when he moved to Sussex to become reader in mathematics. He became a professor in 1967 and a pro-vice-chancellor in 1972. Aged 47 and married with four children, Professor Scott is a fellow of the Royal Statistical Society and has served on its council.

At La Trobe, he succeeds the founding vice-chancellor, Professor David Myers. The university was founded in 1964 with ideas similar to the British new universities. It still has schools of studies and a committee that endeavours to cultivate multi-disciplinary work. But most of its members admit that, in all but name, it has departments of a fairly traditional kind. Its early experiments with a collegiate system were rapidly abandoned.

When Professor Scott takes up his appointment next July, he will join eight other British vice-chancellors in the 19 Australian universities. All the most recently founded universities—Murdoch in Western Australia, Deakin in Victoria and Griffith in Queensland—have British vice-chancellors. The vice-chancellor of Flinders University, South Australia, is American. Professor Bob Whelan, an Irishman, leaves the University of Western Australia for Liverpool in January.

Several of the leading advanced education colleges and institutes of technology have overseas directors—the South Australia Institute of Technology has a Welshman, Cerra College an Englishman and the College of Advanced Education an American.

A survey published in the May 1976 issue of *The Australian University* showed that, from 1950 to 1974, 37 per cent of all academic appointments in Australian universities at the level of lecturer or above were from overseas (though not necessarily overseas born). Of these, 37 per cent came from the United Kingdom and 10 per cent from the United States and Canada. A comparable survey of appointments in 1950 to 1974 showed that, though only 3 per cent came from overseas, 8 per cent came from the United Kingdom.

In the later survey, La Trobe was the highest of any Australian university.

Some Australian-born academics speak angrily of what they call "the colonial cultural cringe". They claim that the appointment of British academics to senior posts stems from the snobishness of local academics and from their desire to appoint people who do not know the politics of the local scene and are therefore, by more easily convinced.

When Professor D. A. another former Sussex academic, appointed last year as vice-chancellor of the Australian National University, an anonymous letter of criticism was published in the university newspaper. It stated: "Our university has a truly national union, while Englishmen, however capable, are its most senior officers." It noted that Australia's newly governing, neighbour, Papua New Guinea, had recently appointed a local as the vice-chancellor of the university, even though the great majority of the academics were still from overseas.

## Mrs Williams welcomed in high hopes of fair deal

by David Walker

The appointment of Mrs Williams as Secretary for Education has been warmly welcomed by the universities and colleges. She is regarded as someone with the political and customer affairs, and during the last days of the 1966-70 Labour Government she specialized in Home Affairs. She is well known as a supporter of British entry into Europe and associates with the Socialist Commentary version of democratic socialism and has a reasonably safe seat on the National Executive Committee of the Labour Party.

Her personal knowledge of the academic world is extensive. Educated at St Paul's Girls' School and Somerville College, Oxford, where she took a second class degree in politics, philosophy and economics, she spent a year at Columbia University in New York. She was formerly married to Mr Bernard Williams, Knightsbridge professor of philosophy at Cambridge University.

In addition Mrs Williams carries a general reputation as a liberal with a deep personal interest in education and human affairs during at least from her time as general secretary of the Fabian Society. At the DES in the late 1960s she condemned student violence but pledged in 1970 that students and staff would enjoy an "unparalleled degree of participation in running the new polytechnics". On the one hand she said of university education that it was "not a luxury but a necessity for the student to study or qualify then there is no obligation on society to finance his or her higher education". But I hope equally that Mrs Williams in her time has had the chance to observe the universities and how well they are coping

with a difficult financial position. Mrs Williams brings to her new office extensive political experience and a firm base in the Labour movement. For the past three years her brief in Parliament has been to secure a "fairer deal" for education.

Mr Bill Boarden of the National Association of Teachers in Further and Higher Education said: "We hope that she will be prepared to push to ensure that a hearing is given to the needs of education."

Education's voice had not been heard in the Government for some months, he added. Polytechnics look on the appointment with a degree of confidence. Mrs Williams improved many people with her grasp of the further education system when she was Minister of State for Education from 1967-69. Dr Arthur Suddaby, chairman of the Committee of Directors of Polytechnics and president of the City of London Polytechnic, called her "enlightened" understanding of the public sector at a Council of the Polytechnics conference in London.

The "thirteen points" suggested by Mrs Williams during her previous spell at the DES for economic reform in the universities were welcomed. Professor Bill Wallace of the New University of Ulster, a former president of the Association of University Teachers, warned this week against resurrecting anything that would lower teaching and research standards.

Over the course of the past few years some of the issues she raised have taken on substance", he said. "Universities are now more realistic, more concerned with economy and their relationship with wider society. But I hope equally that Mrs Williams in her time has had the chance to observe the universities and how well they are coping



Mrs Williams and Mr Gordon Oakes

Williams when she returned from herself said he had never been a favourite of Mr Callaghan and had not expected to survive a reshuffle.

Some educationists are upset at what they consider is the too rapid change in ministers at the DES. Professor Wallace, expressing a view common in the AUE, listed the three Secretaries of State since 1974 and the range of changes of Ministers in the public sector and in the universities, a man who brought a great deal of experience to bear on his job. Some slight mystery hangs over his going since Mr Fowler's policies are very similar to those of the Prime Minister and the policy lines he was following were perfectly acceptable to the Cabinet. He

separating the various sciences at a time when they were becoming increasingly interdependent, and uncertainty over how far a research council ought to serve a Government department, rather than a profession or the Government and the public as a whole.

There was a limited scope for transferring some of the specific short-term research carried out by the research councils to the appropriate ministries, as this would bring the research workers concerned into close touch with practical realities.

Another issue under debate at the time of Mrs Williams's article was the relationship between scientists and society. Here, she said, the key lay in the communication between scientists and politicians, and greater public involvement in scientific and technological decision-making.

"Science today is too much a closed world and I believe the scientific establishment has an obligation to society to let more light in", she wrote.

There was a need for a more effective machinery for discussion about the uses to which scientific discoveries had been put, given the growing concern about the impact of advances in fields such as biology.

"One starting point would be a survey of work being undertaken in different sciences, in language able to be understood by the layman," Mrs Williams wrote.

She suggested that the Royal Society might consider whether there should be a code of practice for scientists, and that the British Association for the Advancement

## New boom 'will not bring back 1960s'

from Paul Moorman

Higher education should not assume that it would automatically benefit from the next upturn in the economy, Mr Fowler, Minister overseeing higher education until last week, said in a speech to the House of Commons on Wednesday.

In a keynote speech to a major OECD conference on institutional management in higher education, Mr Fowler said that investment in the tertiary sector in the boom period of the 1960s had been based on unreal expectations. Politicians had now realized this and would be wary of committing resources again to higher education in a boom. They no longer believed that investment in education provided a solution to social problems which had their origin outside the education system.

Instead, he said, higher education would have to accept that Government money might in future be channelled as a priority directly into housing, welfare and employment programmes.

Extensive research has been published, particularly by Coleman and Jencks in the United States, to show that higher education did not provide "the panacea to social and cultural problems that some once seemed to see in it".

In a period of retrenchment, universities should concentrate on their fundamental role, said Mr Fowler. This was the preparation of students for the vocational. It had been the primary concern of the institutions of higher learning in medieval Europe.

He urged universities not to adopt the Canute-like stance of trying to command "less noble" institutions of higher education to aim for vocational instead of academic excellence.

Rather, the universities themselves should be re-emphasizing the vocational objectives which they were created to pursue and which they had once provided. "Vocational" should not be confused with "narrow vocationalism". Universities should also be devoting more of their energy to the career counselling of their students. Such an activity would not only presuppose a lowering of standards of excellence.

Mr Fowler said: "Those engaged in higher education could usefully spend a higher proportion of their time explaining to children at school what are the educational and career opportunities linked to their proposed degree courses."

"I would suggest that this approach avoids the crudity of oversimplifying manpower planning, while demonstrating the will of the higher education system to meet the manpower needs of the economy as best it can."

Institutions of higher education, too, would have to abandon the "more extreme forms of autonomy if they were to make a case for expensive state aid."

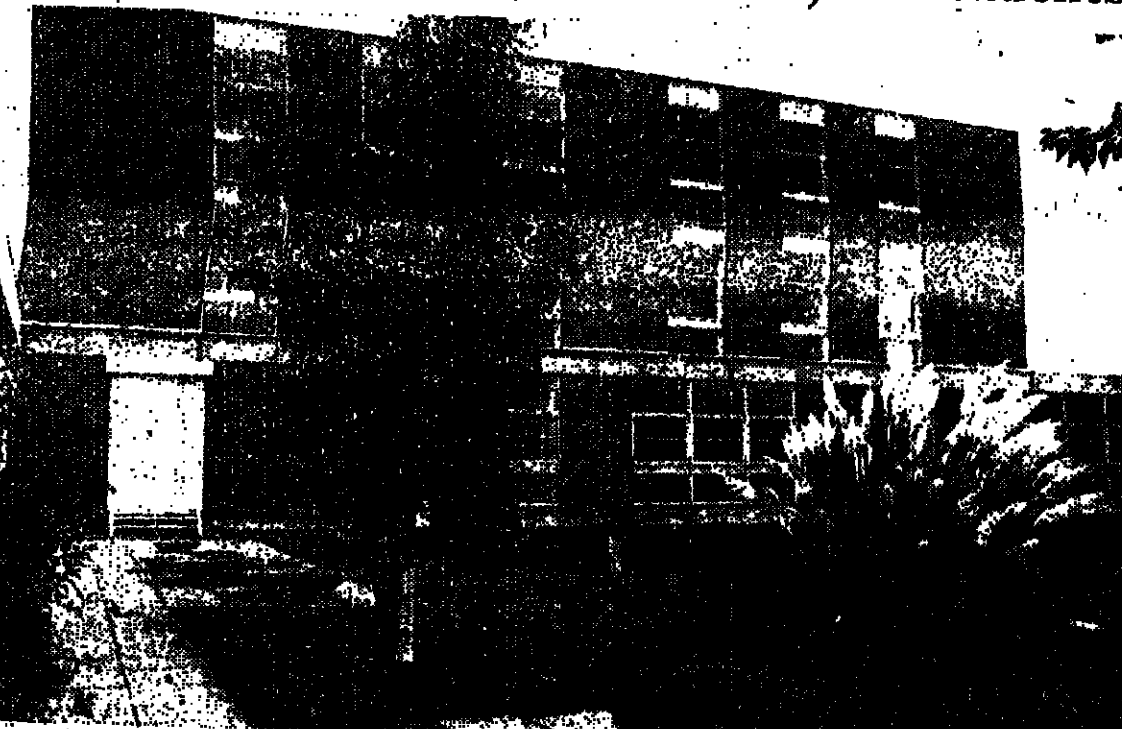
The autonomy of the teacher was a prime example, said Mr Fowler. It was necessary to reject "the deep-seated belief that the professional self respect of the teacher can only be safeguarded if he uses teaching material prepared by himself."

"I hope that the success of the Open University will lead us to question that doctrine. There, almost no material that is issued can be said to be the work of one man; and most of the teaching is done by other than those who have prepared the teaching material."

The conference was being attended by more than 300 administrators and heads of institutions of higher education from the 24 OECD member states. A strong contingent came from Britain.

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## Merger college opens doors to 6,500 students



North Worcestershire College, part of its 40-acre campus.

by Jane Headley

North Worcestershire College, the first college in the West Midlands to combine higher and further education, opened its doors to students this week.

The new college, which has come into being with the merger of Sharnstone New College and Bromsgrove College of Further Education, will have approximately 1,500 full-time and 5,000 part-time students.

The two colleges are located in adjoining buildings on a campus of over 40 acres. The new college has, therefore, a physical unity unique to colleges of this type.

Essentially this is a very practical college concerned with vocational courses and training to meet today's needs for flexible education provision for the 16-plus age range.

Courses provided at the college are organized within five schools: business and management; educational, social and community studies; arts and humanities; science and the environment; and technology. As well as the established BEC degree, new courses being offered include the two-year full-time diploma in higher education and the college's part-time BEC degree, validated by the CMAA.

Last year Sharnstone New College faced a serious threat of being closed completely following cuts in teacher training places.

An one-time Hereford and Worcester education committee voted to recommend that a merger should take place between Sharnstone and Bromsgrove College of Further Education, but without any teacher training places. The 1,100 teacher-training places allotted to the college have been divided between Worcester College of Education and Hereford College of Education.

North Worcestershire College has been allotted 450 teacher-training places by the DES and this year's intake is 150.

City of Liverpool College of Higher Education, another of the new diversified institutions to come into being this autumn, reported this week that it expects about 80 per cent of its graduating students to find jobs in teaching or education, despite the high teacher unemployment rate.

Mr James Clegg, the appointments tutor at the college, which was formerly the C. B. Mott College of Education, said: "Out of the 320 students for whom we have to find jobs, 205 have already been appointed to full time permanent teaching posts."

In addition, in the next few weeks 25-30 students will be offered job creation employment in education, such as preparing teaching kits.

Considering that there are about 24 students whose employment arrangements we do not know, the total who have found jobs reaches about 80 per cent. This is very similar to the proportion last year, and is very gratifying in such a difficult year."

Mr Clegg thought that one of the reasons could be that the college had an appointments service, which many colleges did not have.

## NUS to sack 30 travel staff after £350,000 losses

At least 30 out of 210 staff in the National Union of Students' travel service are to be made redundant next month. Six of the service's 40 offices, most of them in student unions, will be closed.

The cutbacks have been forced on NUS Travel by recent heavy losses, estimated at around £350,000 over the past two years. The losses are attributed to the slump in overseas travel bookings, which has hit several travel companies this year.

Last April's NUS conference in Llandudno was warned in the executive's annual report that redundancies might be necessary. Delegates expressed distaste and the relevant section of the report was referred back. NUS Travel, fully owned by the union, is controlled

by a board on which members of the NUS executive have a majority. They are already being accused of hypocrisy, in the light of the union's current campaign against teacher unemployment and its past protests against redundancies of manual workers in universities.

Particular criticism is likely to come from the Students for Representative Policies group which is planning to set up a rival service. The SRP has frequently criticized NUS Travel for alleged inefficiency and described the £100,000 annual salary, drawn by Mr Michael Naylor, managing director of the union's services, as "excessive".

One of the union's other services, the printing company, Phoenix, is also making a loss.

## Oil keeps graduates in Scotland

Three-quarters of last year's graduates from Aberdeen University have taken jobs in Scotland, according to a survey by the Scottish universities careers office. Aberdeen is to monitor the search for jobs this year to assist the local employment in the oil industry.

Generally, employment of graduates during 1975 did not worsen and only 3 per cent were without at the end of the year were without the permanent jobs. The unemployment was spread evenly between men and women and between degree subjects.

There are grounds for anxiety in the future, however, both because of the high unemployment rate in the public sector and because the public sector has been more reluctant to apply for the jobs than in the past. The simple fact of the matter is that a graduate who wants to apply to the people who have jobs on offer seems hard to grasp.

## New minister 'understands science'

by David Dickson

It is ironic that the scientific community should welcome the appointment of a Minister who, five years ago, could write that "for the scientists the party is over".

Yet there is a general feeling that in Mrs Williams, the newly appointed Secretary of State for Education and Science, scientists at least have someone who speaks their language and understands their problems.

As the head of one research council said this week: "She seems, on past experience, to appreciate, for example, the problems both of the development and the practical application of science, and to realize that one cannot get by with alighted answers on complex issues."

Although at present it has not yet been decided how Mrs Williams will divide her responsibilities with Mr Gordon Oakes, who succeeds Mr Fowler as Minister of State at the DES, it seems likely that, in common with her three immediate predecessors, she will take personal responsibility for scientific matters.

If so, she will be no stranger to the scientific community, with whom she came in wide contact during her previous period as Minister of State in the Department of Education and Science from 1967-69.

It is largely on the basis of this past experience, for example of the attempts she made to encourage dialogue between scientists and politicians, that her new appointment has been greeted.

Str John Gray, secretary of the

Medical Research Council, said that she had previously made "a very good and thoughtful Minister of State" and that although the problems now faced by science were considerably different from what they had been eight years ago, at least it would find an "understanding voice" in the Cabinet.

The research councils at least seem assured of an ally in their attempts to maintain a relative autonomy from the more direct instruments of State—that is if Mrs Williams's past statements can act as a reliable guide.

Writing in *The Times* of February 27 1971, for example, she said: "The independence of research councils matters; it matters in order to establish the bona fide of the work done in the eyes of other scientists both in Britain and abroad, and it matters because research findings should not be influenced by political or professional pressures."

Although ministers and officials would not, she said, conceal the results of research, it was a proven embarrassment—such as the environmental dangers of approved pesticides—it seemed simpler and politically easier that a minister of education, not subject to the conflicts of interest of other ministries, should be responsible for financing scientific research.

"The choice to be made can then clearly be put to the Cabinet or whatever other body has to reach a decision, rather than being hidden inside the walls of a single department."

Prefiguring the debate on the Rothschild report, which was to appear later that year, Mrs Williams said that there were "major drawbacks" in the "tidy doctrine" of putting the research councils under the appropriate Government departments.

These included the dangers of

separating the various sciences at a time when they were becoming increasingly interdependent, and uncertainty over how far a research council ought to serve a Government department, rather than a profession or the Government and the public as a whole.

There was a limited scope for transferring some of the specific short-term research carried out by the research councils to the appropriate ministries, as this would bring the research workers concerned into close touch with practical realities.

Another issue under debate at the time of Mrs Williams's article was the relationship between scientists and society. Here, she said, the key lay in the communication between scientists and politicians, and greater public involvement in scientific and technological decision-making.

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There was a need for a more effective machinery for discussion about the uses to which scientific discoveries had been put, given the growing concern about the impact of advances in fields such as biology.

"One starting point would be a survey of work being undertaken in different sciences, in language able to be understood by the layman," Mrs Williams wrote.

She suggested that the Royal Society might consider whether there should be a code of practice for scientists, and that the British Association for the Advancement

of Science could do much more to sponsor conferences and seminars at which scientists, social scientists, journalists and politicians could discuss science in a wider context.

(It is probably a coincidence that Mrs Williams later became a member of the working party established by the BA to look into the social problems of biological advances, and took part in a panel discussion on this subject at the BA's 1974 meeting in Stirling.)

The final point made in the 1971 article was that the same type of mechanism might be established within Government circles, with a committee of senior scientific advisers—a "joint committee on the future", as Mrs Williams called it—holding regular meetings not only with Ministers, but also with Opposition spokesmen and "MPs with special knowledge or concern".

Anticipating this way later moves by Professor Ralf Dahrendorf, director of the LSE, and others, she wrote: "I suspect that the huge choices posed by science have been neglected just because they do not have to be resolved today."

"But there is not time to wait for the next generation to save us from our responsibilities, as politicians or scientists."

Five years later, the shape of the debate about science has changed dramatically. No longer need politicians fear as Mrs Williams did then, that the continued expansion of the undergraduate intake to universities up to 1981 would place a major strain on research facilities, if these attempted to expand at a comparable rate.

Neither does a prediction of "only" a 4.1 per cent annual growth rate in the science budget compared to one of 13.5 per cent between 1960 and 1965—appear quite so gloomy when set against the virtually stagnant budgets of today.

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## Campaign planned as cuts warning

A week's campaign warning the public of the danger of education cuts is to be launched in November by the Council for Education Advancement, a body mainly representing the teachers' trade unions.

Mr Bill Boarden of the National Association of Teachers in Further and Higher Education is the council's chairman and Mr Henry Clough of the National Union of Teachers is its secretary.

## UEA faces costly blue asbestos cure

The cost of coping with the blue asbestos at the University of East Anglia will run into tens of thousands of pounds, the university estimates.

A factory inspector has urged that urgent action be taken in the three buildings of the university. He recommended that the asbestos in the arts building be removed because of its condition, and that in the chemistry and biology buildings be sealed off.

The asbestos, discovered recently after a routine safety check by the university's safety officer, had been used in a roof-level plant room in the arts building and as a fire-break in service ducts in the other two buildings.

It has been agreed that it is unlikely that anyone in the university will be affected by the sort of exposure to blue asbestos which they may have had. The safety committee has said, however, that those

who have been most at risk, such as the science staff who have worked in the areas, should have the opportunity of medical screening.

A full survey of all possible sites with blue asbestos is to be carried out, both to establish if there is any more and to identify any particular problems requiring further advice.

The safety procedures are to be out by the end of April next year.

## NEXT WEEK

Jonathan Culler on Semiology. A. Rowland Jones: teaching accommodation.

C. W. Kilminster contributes to a series of pages on maths and physics books.

Peter Wilby: Australian methods of selection.

Centenary of Dewey Library system.

Charles Carter on industry and technical progress.







# Why it is time to cross the hostile binary line

The polytechnics were set up as a logical analysis, albeit of some value judgments, of educational trends. The of academic respectability, the expense of direct commercial relevance was a well-phenomenon in university life. If what was needed at the time was an expansion of higher education, it was to be sought by an extension of the university system.

The reasoning and the historic sequence of events are well chronicled. Mr Crosland, Secretary of State for Education and Science, in his 1963 White Paper, *A Plan for Polytechnics and Other Colleges* heralded a new type of higher education institution. They called the new institutions polytechnics instead of universities, kept them in the public sector, to be thought they would be more directly subject to democratic control, and required them to operate as comprehensive institutions in the sense that they were to provide full-time, sandwich and part-time courses of higher education at all levels.

The creation of the polytechnics confused many people and alienated others. Some in the more developed public sector institutions, the independent polytechnics, were indignant that the institutions were to be denied the opportunity of developing into universities. Individual departments in some of these colleges were already larger and contained a range of advanced work and research equal to or even surpassing that in the recently formed technological universities. To these people, the White Paper seemed like an unwarranted and dangerous interference with a natural phenomenon. People in colleges not chosen for polytechnic status also saw their development restricted and their academic aspirations blocked.

Finally, some people in the universities saw the polytechnics as a threat to the principle of academic autonomy which the universities had carefully nurtured, and feared that the polytechnics might be used as a lever by which the universities might be brought under a perceived view of social need or cost-effectiveness.

The period since the polytechnics were created has done nothing to all the controversy. There was always a more or less sharp division between the public and private sectors, but now the binary line has almost taken on the aspect of a hostile frontier. Issue has been taken on many matters and it is to be expected that the ferment to influence, and possibly to influence, is still continuing. It is still regrettable since the controversy has often been driven to adopt extreme stances when compromise might be more appropriate. The first thing I would like to do, therefore, is to dispel some of the uncertainties and to do this by presenting information about the present state of the polytechnics.

The number of full-time students in the polytechnics increased from 42,238 in 1972 to 62,261 in 1975. Some 100,000 students on part-time day and evening courses have been added in recent years, with the following percentage changes—1972-73 +2 per cent, 1973-74 -4.1 per cent, 1974-75 +4 per cent. In the same period, evening only enrolments have changed -7 per cent, -1.8 per cent, and +4 per cent. It has been claimed on the basis of these and similar analyses that the polytechnics have been a success.

I think there is little truth in this assertion and I am aware of no instance in which polytechnics have deliberately reduced part-time student numbers to benefit full-time courses. Some polytechnics have been stopped in some polytechnics, but this has been because of the level of work involved and such courses have not ceased to exist but have been transferred to other colleges or further education dealing with the appropriate level of work.

Large numbers of students attending polytechnics on short full-time courses are excluded from the enrolment figures shown in the current year, for example, there will be approximately 45,000 such students who, on average, attend for five days. The short courses concerned provide a direct and often

tailor-made service to industry, commerce and the professions, and in many cases, these courses arise because of suggestions made to polytechnics by employers of various types.

The average polytechnic therefore provides advanced education for some 7,000 students within the calendar year. The size of the average polytechnic in 1975-76 was over 4,000 full-time equivalent students.

When looking at the breakdown of student numbers between courses, it is important to emphasize in the first instance that most of the work in the polytechnics, more than 90 per cent, has entry qualifications at least equivalent to university entry. The lower-level work which remains is mainly accounted for by courses which require specialist facilities or teaching which could not be duplicated reasonably in another college. Courses at above first degree level and sandwich enrolment and the overwhelming majority of the degree courses lead to degrees of the Council for National Academic Awards. Similar courses for more than 30 per cent of part-time student numbers. Other advanced courses, which account for

approximately 10 per cent of the full-time/sandwich and of the part-time numbers, include Association of Certified Accountants and Chartered Institute of Bankers and Management, the Institute of Personnel Management, the Institute of Work Study Practitioners, the Institute of Physics and of the Royal Institute of Chemistry, social work certificates, certain advanced City and Engineering and scientific subjects account for more than 33 per cent of the full-time/sandwich figures and for 40 per cent of the part-time figures, social administration and business studies courses for 31 per cent and 39 per cent respectively. Since a considerable proportion of the remaining work is concerned with the remaining full-time and sandwich courses, there is little justification for the view that the polytechnics are becoming "liberal arts colleges". "Incidentally," other professional and vocational includes in the context, architecture, catering and economics, nautical subjects, transport, wholesale and retail trades, librarianship, photography and journalism.

So much for the present student population of the polytechnics, but what about the future? I want to try to look ahead to see how this student population is likely to change. It seems likely that the total demand on the polytechnics is likely to be of the order of 134,000 full-time and order of 147,000 full-time and sandwich places in 1981. It is important to note that this projection takes no account of the increasing teacher training places in the institutes of higher education. If these are not full utilized, the pressure on the polytechnics is likely to be even greater. The detailed resource implications of these predictions remain to be calculated, but it is perhaps not without significance that the White Paper on Public Expenditure and the projected increase in student numbers in higher education

over the period 1975-1979 of 8 per cent with an approximate increase in projected capital and current expenditure of 6 per cent. On the basis of present and previous subject area analyses, the division of students between the main subject areas in the polytechnics is likely to look rather similar in 1979/80 as in 1975. This breakdown like the total student number analysis could be influenced by direct Government action, but it is now almost too late for any Government initiative to affect the figures significantly in 1979.

So what happens after 1986? That is a very interesting question to which some unions have already addressed themselves. "What is the demographic pattern in your area? How big is the 1980 'hump' and how deep the 1995 'trough'?" When is your college going to discuss the implications with the authority?

It is perhaps worth observing that if one takes the central projection, the decline in the 18 to 24-year-old age group population of 20 per cent based on the 1986 figures, this decline taking place over the successive 10 to 12 years. On the basis of this projection it would be 1993 approximately before the size of the group fell to its 1976 level. All of the projections are fairly long term in character and apart from being affected by fundamental inaccuracies in the original prediction, their impact on the higher education population may be modified by alterations in student demand, changing course and attendance patterns, the varying fortunes of individual institutions and classes of institutions. Given the uncertainties, it is interesting to reflect that the total number of higher education students anticipated in the White Paper on Government Expenditure is an approximately constant proportion (21.5 per cent) of the 18 to 21 age group population up to 1979-80. The pro rata increase in this proportion to offset the decline in the age group beyond 1986 would be a very small, say 21.5 increased to 21.6 per cent in 1991, which is not beyond the bounds of possibility as the state of the economy improves.

I hope the figures I have presented will persuade the doubters that the polytechnics are not a threat to the academic objectives set for them in the 1966 White Paper, although I realize I shall not convince those determined to remain unconvinced whatever the evidence. It took time for the comprehensive institutions as comprehensive institutions of higher education to become fully accepted within the polytechnics themselves, and for the staff concerned to adapt to the fact that their were not to be universities in the traditional sense. Some colleges of further education have come to recognize the role of the polytechnics in the public sector and have appreciated the general good to be derived from the situation. One leading and co-ordinating role which many polytechnics have been playing for the new Technician Education Council courses and eventually, and the opportunities provided for students to proceed to higher level studies in polytechnic colleges and polytechnic staff. However, the leaders of other colleges of further education have stood out for the best possible motives, for an even more widely dispersed higher education provision so that many other institutions would not be polytechnic character confused by the fact of new institutions of higher education emerging in the wake of the teacher training problems, some of which it is clear will be "indistinguishable" from the polytechnics. None the less, arguments for the concentration of expensive resources put forward in the 1966 White Paper, remain irrefutable, while the gap between the largest institutions of higher education and the polytechnics is considerable.

The attitude of universities towards the polytechnics has been varied. In the early days, universities provided the majority of the CNA and its subject boards and they formed a most important proportion of the membership, although polytechnics have since

account for 75 per cent of the academic membership of subject boards. The success of the polytechnics academically is attributable in a large measure to these members of universities.

Personal relations between polytechnic and university staff have also been open and productive at all levels as befits colleagues with a common major ideal. However, the "official" attitude of the universities towards the polytechnics has not always been helpful and it is difficult to conclude that the differences are necessarily ideological. For example, one vice-chancellor is reported as saying "the polytechnics were a thoroughly bad idea, and they should not have been necessary; the ex-colleges of advanced technology were doing well, and expanded to deal with any shortage of places for engineering students. The universities were moving towards most of the things like part-time courses now being done by polytechnics".

It is clear on the basis of today's figures that the universities were not capable of doing what the polytechnics have done, even if they had the will to do it. Certainly the increased demands of the next few years could not be met without the polytechnics. The interaction between the universities and the polytechnics has been in some quarters seen as a battle for survival. History tells us that the best of all possible worlds does not result from such engagements.

The theme of the polytechnics is relevance. They are unique amongst higher education institutions in having their purpose clearly defined for them. The purpose of universities is more debatable, the conflict between elite and popular functions perhaps irresolvable. Of course, the work of the universities is not without relevance, but not all universities have relevance, or even relevant in higher education. As the vice-chancellor went on to say "I would you can build in a factor to prevent universities from being dominated by the reaction of 'suburban' elements, the private sector is undoubtedly the best way to keep abreast of the times".

Could senates be controlled in this way without destroying the quintessence of the university system? I believe the answer is "no". There is one of the main reasons why the polytechnics have their clear-cut purpose must be the clear-cut purpose of the university. It is hardly a coincidence that society and universities have always been at loggerheads, the former seeking to reform the latter, the latter seemingly oblivious to the needs of the former.

Mr Crosland in his address at Lancaster University in 1967 said: "I want to allay one anxiety... and that is that the dividing line between the two sectors might be too rigid. This is the last thing I want. The fact is that the work of the two sectors are not should be a great deal of variety and a great deal of overlap. Thus I want to encourage mutual cooperation between institutions in the two sectors, while each preserves its own identity. We want to encourage exchange of staff, exchange of going to lectures at another, the shared use of expensive equipment, particularly at postgraduate level, a high degree of mutual co-operation".

There are joint ventures involving the polytechnics and universities, for example, UPIQ (the University Polytechnic Institute of Quality)

ties, Polytechnics and Universities Committee; some shared courses, the MA course in the Lancaster University and the polytechnic; some collaboration on research and the use of specialist facilities. However, these developments are not on the scale intended by Mr Crosland and a case seems to be made for a more sociological and political approach to say that this was inevitable.

I do not believe that this is the very positive action on the part of the universities and polytechnics to the mutual benefits of our higher education provision as a whole, as I called them "participants".

Bob Jordan, the tutor who runs the scheme with the aid of full-time assistant Graham Hayward and three teachers employed at the University of Lancaster, said: "What we hope to do during the seven weeks is to bring about with each of the 48 students a new way of looking at a productive knowledge of the language."

The author is director of Preston Polytechnic.

At Manchester, as at universities all over the country, the summer is marked by a period of intense activity. For some groups the very shape of the academic year dictates that this should be the busiest time. For others it is just that outside events have conspired to bring things to a head in the summer of 1976.

Into the former category falls the work of the team giving Manchester's overseas postgraduate seven-week intensive pre-session course in the English language. Bob Jordan, the tutor who runs the scheme with the aid of full-time assistant Graham Hayward and three teachers employed at the University of Lancaster, said: "What we hope to do during the seven weeks is to bring about with each of the 48 students a new way of looking at a productive knowledge of the language."

In the first place this involves teaching them learning skills—the techniques of listening, reading and taking notes. We also teach them seminar strategy: how, for example, to interrupt when they miss what the tutor has said, or how to ask a question. The students use the language laboratory to improve their fluency and their familiarity with the spoken language. They learn, too, the kind of language they will be expected to understand and use in academic writing. Towards the end of the course they are split into groups so that they can equip themselves with the specialized vocabulary for the particular subject they are studying next term.

For these 48 students from all over the world—from the Middle East, South-East Asia, South America, Greece and Turkey—Bob Jordan's team have organized a special four-week course for 15 students from the Republic of China. Some of the Chinese, nearly all of whom are Teachers of English,

will need to come to Manchester next term for a course in Government studies, or their need is for a specialized political vocabulary. In addition to the general social vocabulary necessary for everyday life, the rest of the students will be given a detailed introduction to the study of an English and Education course.

Once both these intensive language courses have been completed, the students will still not have enough English to do well in their studies. During registration week they test and interview some 200 overseas students to advise on how much help with their English they may need during the next year.

Someone else who has spent part of the summer running a special course is Philip Radcliffe, Manchester's Communications Officer. Every spring for the past five years Mr Radcliffe has organized an eight-week course in mass media for a group of students from the University of Pennsylvania. It was therefore to him that the British Council turned when they received a request from the University of Riyadh in Saudi Arabia for a course on the mass media in this country.

There were three weeks packed with visits to newspaper offices and television studios, with lectures and seminars conducted by professional journalists, broadcasting experts and university personnel. Mr Radcliffe explained: "This is the first time that the Saudi Arabians have sent any of their students out of the country to study mass communications. We are very pleased that they decided to come to Britain. All 25 students are studying for a BSc in Mass Communications at the University of Riyadh and they are all budding journalists and television producers."

We saw this course as a double-edged sword. On the one hand, it gave the students a chance to learn about the press and television in Britain and to learn new ideas which will be applicable to their special needs back home. For

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Marian Blackley explodes the myth that the university personnel take it easy during the summer

# Vacation is no time for university staff to put their feet up

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example, we made sure that they visited the Open University and had a thorough look at Granada's community programme. The course seemed to be well received and we were much pleased that it will become an annual event.

One group of people who certainly will not be doing exactly the same thing this time next year are those running the programme at Jodrell Bank, associated with the United States. Viding spacecraft project on Mars. The programme is under the direction of Dr Brian Anderson, lecturer in Radio Astronomy, and Dr Richard Davies, SRC Research Fellow.

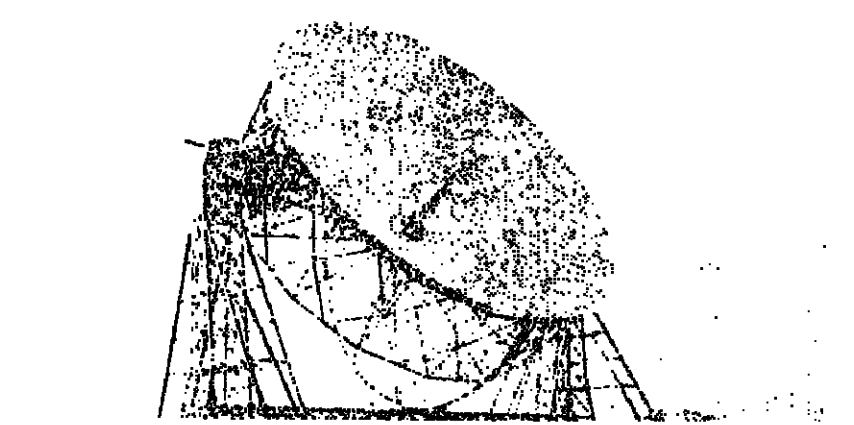
Mr Reg Lascelles, a spokesman for the team, explained Jodrell Bank's contribution: "At the moment on (and around) Mars there are two big radio telescopes, one in the United States and one in England. Jodrell Bank's participation involves using the radio communications system, not for the data being transmitted, but as a system of 'beacons' in the vicinity of Mars."

"There are two main experiments: in one, designed to determine the position of the landers on Mars, signals from the orbiters are picked up on the 250ft Mark II Radio Telescope at Jodrell Bank and simultaneously on the 84ft instrument at Defford in Worcestershire. From an analysis of these results, the exact centre of the mass of Mars can be determined."

"This is then compared with the signals received from a lander, which will be routing round the Martian axis. It is then possible to determine the distance from the centre of mass and, by observing the rotating vector, the latitude and longitude of the spacecraft on the surface of Mars."

"The second experiment is to tie in the coordinates of the solar system to a standard frame of reference. By comparing the position of the centre of mass of Mars, as determined in the first experiment, with that of a quasar, a set of axes can be established for the solar system, whose internal orbital system is known to a high degree of accuracy. This experiment could then be repeated in several years' time, which would give a very accurate reference system."

The Viking Project is not the only matter currently concerning Jodrell Bank. They have also been



Observing Mars at Jodrell Bank

watching with close attention the growth of the third giant radio telescope, which is being built by the university at a cost of nearly £2m near Oswestry in Shropshire. When it is completed, it is hoped that this telescope will be linked by microwave to the other two at Jodrell Bank and Defford and together they will have the effect of greatly amplifying signals received from remote galaxies.

This will help the university team to log information about bodies billions of light years away. A problem rather nearer home which has stimulated special activity at the university this summer is unemployment. Under the direction of Norman Page, staff tutor in the Department of Extramural Studies, a unit at the university has for some five years been carrying out important work on the problems of the unemployed.

Up until now they have been running courses for three different categories of people: redundant executives, housewives wishing to return to work, and a 'job job' course for people who for some reason find their chosen career blocked—because of obsolete skills or ageing, for example.

This year the unit is for the first time introducing an intensive two-week 'in and out' course aimed at people who have just recently come out of employment and who need to revise their job-hunting skills and to make a critical reappraisal of their own ability and job prospects. With financial backing from the Department of Employment the unit has therefore

been spending the summer expanding its facilities (which include a new television studio) and preparing new course material. Next year Mr Page expects that 500 people, more than twice as many as last year, will benefit from the unit's courses. And as the figures show that over 75 per cent of their students are in new employment within six months of completing their course, those benefits look to be substantial.

Other members of the university, too, have spent the long vacation dealing with the problems of expansion and the housing of new facilities. From October 1 the medical school is to become the home of the Medical Research Council's Trauma Unit, formerly based at Carshalton, Surrey. And 10 years after its establishment, the University of Manchester's Rogers Computer Centre is also undergoing its expansion, preparations are now being carried out for the centre to take over the job of servicing the majority of Britain's universities: by the end of the year it will boast by far the biggest computer complex in Europe.

Such a swift survey of the high points of activity at one university ignores the hard graft that is going on in less glamorous areas: the students resitting examinations, the medical students carrying out their work as usual, the administrative staff preparing for the next influx of students. All these activities do, successfully, confound any suggestion that universities in the summer take it easy.

producing materials and these they believe are important to the new comer.

The new teacher on the other hand, although aware of the importance of these aspects of the job, is more concerned to integrate them all into a coherent whole, to find out what is considered important, to gain information about the people, the system of working, the expectations, the standards and the norms of the group to which he or she is to be attached. For the new teacher, it is a challenge to find out what is considered important, to gain information about the people, the system of working, the expectations, the standards and the norms of the group to which he or she is to be attached. For the new teacher, it is a challenge to find out what is considered important, to gain information about the people, the system of working, the expectations, the standards and the norms of the group to which he or she is to be attached.

The extent to which it is possible to overcome much of this uncertainty and to pull the bits together quickly and without undue anxiety depends not only on the individual, but also on the particular group which he or she will join. If this group is supportive it can have a considerable influence on the ability of the new teacher to find his or her feet, quickly and effectively.

This importance of the world's group came over strongly in a study, recently undertaken, of the interests and problems of probationary staff at Sussex University. Reports from other institutions, where they have taken time to trouble to seek the views of their new staff, add further support to this view. To illustrate the differences which can exist, take the situation in which two new teachers at Sussex found themselves. The first was attached to a small, closely knit teaching group and immediately joined a colleague in helping him to plan and then to teach a new course. His room was on the same floor as his colleagues and he saw them nearly every day over lunch and after tea, when teaching problems were often discussed. He felt "part of a family" to use his own words. Contrast this experience with that of another teacher who found himself attached to a large

and complex school of studies. He was isolated geographically from his colleagues in the same discipline and was required to teach students from several parts of the university with which he was not familiar, who were taking only a part of an overall programme of which he knew little. For a long time he felt lost, confused and frustrated.

As might be predicted the interest shown by these two teachers in questions of training differed considerably. One, at least, was to be leant that any attempt which is made to help, support or encourage new teachers, must take their situation into account. If individuals are to be motivated to participate in and benefit from a training programme, then they must see the support which comes from belonging to a small, closely knit, task orientated group.

For the few new teachers who enter a department operating on the lines of the first of the two quoted earlier, there is no real problem: the typical system of occasional workshops is probably adequate. From their secure base these teachers can make the occasional foray to attend a seminar or workshop on such topics as tutorial teaching, counselling or evaluation, as and when they see the need. But most are not so fortunate: for them, a supporting group has to be specially created. This is no easy task, but it can bring very considerable benefits to those concerned.

Instead of imposing a programme which appears to be in two or three distinct parts, the first of which is often the last the majority of new teachers are likely to attend. It would seem better to think in terms of generating a series of largely self supporting groups. How such groups are created will obviously vary between institutions, but they depend on the balance of their intake of new staff: but one might expect to see the formation of a few groups of three or four new teachers attached to an experienced mentor, who has, in the past, shown him or herself inter-

ested in teaching and learning and capable of providing supportive leadership. The aims, procedures and frequency of meetings would be for each group to decide: a group working well together would probably want fairly regular meetings, while one on a fortnightly basis over the first year.

What will happen to each group is difficult to predict. They may wish simply to identify and discuss problems or they may wish to proceed in projects and investigations. Leeds University, which has a similar approach was tried, found that "lecturing" was a popular theme and this eventually led the members of the group to sitting in and commenting upon each other's lectures. Each group could, potentially, fulfil a number of functions according to the individual and collective needs of those involved. Firstly teachers would have the opportunity to participate in groups which have as their prime concern a better understanding of teaching and learning problems generally.

Secondly, the groups would be small and flexible enough to permit their aims and procedures to be determined by those taking part. Thirdly, the way the group arrives at and carries out its agreed policy could form a regular topic for discussion thus leading to a better appreciation of what a good teacher (which incidentally was one of the "problems" most often mentioned by new teachers at Sussex).

Fourthly, and perhaps most importantly, the group could offer the mutual support and guidance which the complex nature of most of our organizations makes it difficult to provide as part of the initial working experience. These ideas are not without precedent particularly in industry and commerce and they have been tried in a very few educational organizations as part (and it should be made clear that they would still form only part) of an overall training programme.

The author is a lecturer in higher education at the University of Sussex.



# University libraries: the case for a national lending system

It is usual to talk of the current library arrangements as a "system" and of course it should be a system, for most libraries are paid for out of the public purse. But in fact the payments come from separate parts of the public purse, and most decisions about libraries are made by independent groups who have little regard for any national plan.

This is hardly surprising, because even the outlines of any national plan are difficult to discern. Yet the essential facts on which such a plan should be based are well established.

There are few in number. First that the annual output of publications in the world has been increasing and secondly that in most libraries 20 per cent of the library's stock accounts for at least 80 per cent of the issues made from the stock.

Nevertheless no library is able to satisfy all the requirements of its users and it must rely to an increasing extent on the support of other libraries. Come one day when a university librarian would regard having to borrow an item from another library as an admission that he had failed.

This is the situation which has confronted university librarians for some time. It is not something that can be taken into account in deciding their library's policy, the majority have tended to ignore it.

The result is that when the University Grants Committee makes some proposals which are intended to rationalize the situation, there is an outcry from university librarians and from some academics whom the librarians have failed to educate about the realities of the library situation.

Illustrated not only by the recent correspondence in *THE TIMES*, but also by an observation by W. J. Gutsman in his article August 6. He writes that the recent proposals from the UGC's working party on special provision would virtually return the foundations on which the British academic library system has hitherto rested.

He fails to state what those foundations are nor what the system is. Possibly these are dangerous questions to consider because the foundations are somewhat vague and "system" is the hardly the right word to use for a conglomeration of libraries.

But undoubtedly there should be foundations and a system. So let me venture a few fields which, most university librarians fear to tread. Three decades ago the main feature of university library policy was clear out. It was to build up as large a collection as possible to facilitate future research.

As the debate continues on the future of university libraries, D. J. Urquhart suggests a co-ordinated academic lending service

convivance of the UGC—who were primarily interested in the administrative convenience of any formula for allocating resources—were numerous.

There was first of all the concept of the comprehensive university library; while it had been used for some time when the Parry Committee met, its death had never been acknowledged and the idea remained unburied.

This was partly due to the acquisitive instincts of many university librarians who as a rule measure their achievements by the number of volumes in their libraries despite the fact that there is no widely accepted definition of a "volume".

Then there was the technical difficulty—if use was to determine acquisitions policy—of measuring in-library use. And finally there was the serendipity argument—the belief in the importance of browsing through the catalogue and along the shelves.

This belief is as a rule an article of faith with university librarians and with many academics interested in library policy. It has not in consequence been subjected to any experimental tests.

Undoubtedly three centuries ago browsing was necessary, because there were no bibliographies and it was practicable because of the small volume of publications. But the situation has changed.

Nowadays bibliographies exist in most subject fields of even the large libraries have as good a collection in any subject field as the published bibliographies.

The question arises whether the bibliographies cover all subject fields. In science the answer appears to be a qualified "yes" but the main emphasis is now devoted to considering whether the bibliographies exist in the most convenient packages for the users.

The position is in the humanities is far from clear. If the bibliographies are inadequate then the first necessary step is to improve them; for surely the research worker is or should be interested in what exists on a particular topic rather than what a particular library contains on that topic (or, worse still, what he happens to stumble across in browsing round the shelves).

But creating bibliographies in all subject fields is not the end of the matter, for it is necessary to ensure that the libraries have them available and that those interested in research know how to use them.

In science it was very clear some years ago that the main trouble was not the non-availability of bibliographies, but that potential users did not know of their existence.

Several universities have endeavoured to remedy this by providing courses on the use of bibliographies, but these courses are as a rule optional extras. Few universities have made the knowledge of the use of bibliographies an essential part of degree or postgraduate courses.

where, than on similar publications in a library which is designed to serve a limited audience.

Thus it should not be surprising if the rate of growth of expenditure on the B.L.D. is greater than that for other libraries. The problem facing university libraries now is to evolve a policy about what to acquire and what to retain which recognizes that the B.L.D. exists.

Economic considerations alone will not be a sufficient basis for library policy but such considerations must call into question the idea that each academic institution must have its own separate library. The idea verges on the ridiculous when a university and a polytechnic on adjacent sites maintain their own independent libraries.

The low use of such a high percentage of material in any academic library will, in the end, require something more serious and effective than the organization of voluntary cooperation between the libraries of autonomous institutions.

This is a subject on which there has been a great deal written, but there have been few achievements. The basic trouble is the enormous financing arrangements. Although cooperation in theory would often be economic it usually involves some expenditure.

Such expenditure may be relatively small, but it is seldom related to the objectives and the direct concern of the financing body, authority for this expenditure is normally difficult to obtain; and in periods of financial stress, it is unlikely to be available.

Nevertheless in spite of the avarice financing arrangements for universities and for polytechnics the need for a co-ordinated academic library service is already apparent.

Once this idea takes root, however, let us admit that we are a long way from such a service. Consideration will have to be given eventually to bringing into being a national library service.

Before this thought produces an outcry, let us admit that we are a long way from such a service. Consideration will have to be given eventually to bringing into being a national library service.

He has written at length about the need for a change of approach in academic libraries. At the national level the reference division of the British Library, which is now over three years old, has not yet begun to lend, in support of the lending division, even the very modest for foreign language material held in Bloomsbury.

The public libraries have yet to adjust themselves to local government reorganization. In theory the reduction in the number of library authorities should have resulted in better services for the individual users of the public libraries.

In addition, if the ideas about library cooperation have any reflection in reality, each public library service point should have a large notice telling the user that the library can supply a copy of any publication from anywhere, or assist with the supply of information on any topic.

Such notices do not exist. Some local authority chief librarians have instructions to maintain a "low profile" and in some library areas, far from there being a unified service to all the service points of the authority, it is only in the relationship of special libraries to the B.L.D. that the concept of a national library service has begun to have practical results.



Aids for the disabled: a legitimate focus for polytechnic research.

## We must solve problems, not just produce theses

Patrick Nuttgens argues that 'research is not fundamental for a polytechnic'

The fundamental point about a polytechnic is that it is a teaching institution. As part of the provision for higher education made by the local education authority and supported wholly by the public, it is expected to make a contribution to the country by providing courses, developing skills and teaching students in such a way that they can contribute to the work of industry and the professions and benefit society as a whole.

A polytechnic is, in Whitehead's phrase, concerned with the art of the application of knowledge; the application of knowledge is the measure of its work and the key to the excellence of its component parts. The test of a polytechnic's success is not whether it has climbed further into an ivory tower, but whether its work in teaching and doing the jobs for which the country has a need is used by the country.

In all of this, I have never found anything opposed to the principle which I have previously expounded, namely, that it is impossible to teach effectively at the level of higher education with which a polytechnic is concerned unless the teacher is pursuing a study or learning connected with the subject he is teaching, and enlarging the knowledge that goes with those skills.

One of the commonest complaints from students in higher education is not lack of research on the part of their academic staff but an obsession with research at the expense of their teaching. In the polytechnic world one of the commonest complaints I hear is of a lack of knowledge on the part of academic staff of the reality of the jobs for which they are training students; it seems that they are sometimes themselves short of experience in the application of knowledge.

Each case complains—an obsession with private research and a lack of familiarity with the actual work—reflects the same serious shortcomings in higher education in this country, namely its remoteness from the reality of work. It would be easy for a polytechnic to join the research bandwagon and become still more unreal and still more ineffective.

Two particular factors are likely to affect a polytechnic's attitudes, but would in my own view be disastrous for the kind of institution we are trying to produce.

First, so far as staff are concerned, status and prestige in the academic world tend to be given to those who engage in research rather than teaching; there is therefore a basic pressure to engage in research at the expense of teaching.

## Living with one's head in air and feet in concrete

The Arts Council is soon to issue its report on the affairs of the Poetry Society. Edward Neill relates tensions in the society to those in poetry itself

The Poetry Society, recently said to be in danger of forfeiting Arts Council support of £23,000 and a good deal of its custom as a result of various internal disputes, has a membership of 12,000, its annual situation is carried on by a small staff of about 100 who would not necessarily remain intact were the funds to diminish or be withheld.

The society publishes new poetry annually in its *Poetry Review*. It provides a platform for poets at its centre in Earl's Court Square, and organizes a nation-wide verse-speaking examination, complete with its own regulations and syllabus, and accompanying anthologies.

The society also has its own printing press at its Earl's Court headquarters, which it makes available at cost to producers of poetry magazines—a strategically important point, given an interregnum-like resurgence of little magazines and home presses.

This is intended to counteract what the society sees as the recalcitrance and arbitrariness of the larger publishing houses. The *Poetry Review* itself is printed here in its haphazardly run, dependent upon unpaid labour.

There has been much talk recently of "activism", "extremism", "militancy"—what, in terms of actual writing, can this mean?

In the general ambit one can detect Tzara and neo-dada, the New York avant-garde, Apollinaire, found sound-text poems, and a desire to substitute words for elocution.

There is also a denial that "poetry is recognition patterns within a speaker-consumer society", as Eric Mottram puts it in a combative and stimulating editorial in a recent *Poetry Review*.

The society might, then, be described as freemasonry and the razor's edge rather than drumming up custom.

It is possible to admire this, while at the same time feeling that it is folly to put all in hazard in this way. It is also obvious that the society is at odds with itself (the "brutalist" conceits given by

the dandies at the Cabaret Voltaire consisted of a clanging of pots and pans, whistles, shouts, and banging on any convenient object), and also of unspoken deference to an unwritten literary Hudson Report.

For one suspects that it is the assumption of recent American hegemony, in poetry of all things, that has caused most hackles to rise.

Deeply embedded in its ethos is William Carlos Williams's old complaint that Eliot "gave the poem back to the academics", echoed in Roethke's dark broodings about the "rat-trap sensibility" which "slams down on a subject, mauls and kills it but retains it".

Modern poetry is a continuum of crisis. By this, and this only, it has existed; it has been, in the phrase picked up from Buckminster Fuller by Hugh Kenner, a "self-interfering pattern", and there is something inherently paradoxical about its "progress".

W. B. Yeats compared modern poetry to a horse without a rider, while Roy Campbell likened it to a rider without a horse, yet both were, poetically speaking, cavaliers.

Robert Lowell's career is founded on self-contradiction, with a movement towards a "palimpsest-poetry" in which the poem itself is a highly provisional entity because the self also is.

Nearer home, P. N. Furbank has, in a recent *Open University* course unit on Yeats, reported that Auden saw fit to regard poetry as something of a "marvellous game"—all motor-cycle maintenance and no Zen—after the deep modernist seriousness of Yeats and Eliot.

Although perhaps the entry of what might be called the amusingly

beba coca cola  
babe coca cola  
beba coca caco  
caco cola  
clocaca

Décio Pignatari's concrete poem "beba coca cola" ("drink coca cola") reproduced from *Essays by Edwin Morgan* (Carnegie New Press).

sterile is more heavily signalled in William Empson, some of whose lines—"I can understand Man putting the academy into the fields."

At any rate, a book as intelligent as Winifred Nowotny's *The Language Poets* Use shows that the poet's relationship to "game" can be at most asymptotic, as it is in the case of the poet who is at liberty to re-write the rules, and presumably either draw up a new social or anti-social contract with his audience, if he has one, or banish it altogether.

A recent essay on James Joyce, who desires to "let sounds be themselves", and whose influence lies behind much recent poetry, "concrete" and other, has deplored what Joyce does as being too liberal in making our stuffy freedom from prior expectations.

If Joyce is, as I assume, symptomatic of at least of some what is now going on, one need feel even less inhibition about pointing to the re-emergence of Tristan Tzara, who did not share the palimpsest-modernist confidence of Yeats's Happy Shepherd that "words alone are certain good" any more than he shared

For related reasons, no doubt, Eric Mottram claims that he "does not believe that poetry should necessarily communicate with the rapidly expected by the consumer of cigarettes... newspaper print or verses at the bottom of a column in a post weekly or after the news on BBC2". Yet much contemporary poetry does look as would be instinctive about the media's mass-fodder.

Tom Leonard, for example, writing in the *Poetry Review* issue, who writes, very entertainingly and very ideologically "Glasgow as she is spoke", is roughly as esoteric as

But the essential truth about "concrete" is that its real achievements live and move and have their being in the colleges of art, like any other *Kunstwerk*.

Concrete could even be construed as a simple old-fashioned power-mad take-over bid by the visual art. For the lingo duck, poetry. That granted, it seems idle to deny that it has been visited by genius.

If its achievements—by Zdzislaw Gombrowicz, Decio Pignatari, Ian Hamilton Finlay et al—are characteristically modest, there is, on the other hand, John Farnham, with his marvellous Tower of Babel screen poems, and there is Kenelm Cox, the Shelley of the movement, killed in a road accident, and Tom Edmonds, with his glass cube astro-poems, his Keats.

One does not have to feel a strong sense of empathy for Jeff Nuttall's poetry, or to like Lee Harwood's translations of Tzara very much, or to judge Bob Cobbing to be other than a high-grade bruttite or to share Houderd's "foal for apophelie wu-ness" (sic), to reserve judgement on the Poetry Society and its ambit.

The New Critics took the existence of tension to be almost the defining characteristic of good poetry. Perhaps this was understood to correspond to the tensions we are conscious of in society; if so, "tensions" at a Poetry Society are inevitable and right, and are not necessarily the infallible sign of breakdown.

Yet there are confusions, I think, as well as tensions which spring from the uncertainty of the role of poetry in society.

There are no neo-Georgians on the council of the society urging something weak, something simple, something English in an artificially deprived sense. On the other hand the "modernists" are not so much as Jeff Nuttall do not seem notably polyglot or even cosmopolitan.

No one is expressing any kind of exclusiveness. Challenged by David Lovibond in *Tribune*, Bob Cobbing replied with a history of the society and implied the need for eclecticism and continuity.

Those who wish poetry to innovate in some way, and thus create the taste by which they will be judged, nevertheless accept the authority of the number of subscribers.

But are they aware as they might be of the deep distinctions between a hard-earned cosmopolitanism, based on fuddy-duddy activities like actually learning foreign languages, and an internationalism that depends on a retreat from the word adumbrated by Dr George Steiner, and Ted Hughes's *Crow*?

Of the distinction between the therapeutic and utopian radical approach is no poem that became popular during the "movement" in the late 1960s, and the actual creation of new possibilities of awareness through language.

Certainly a poetry which offers in some sense a transcendence of journalism and broadcasting cannot hope to win immediate recognition from a mass audience.

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## 'The engineer is more of an artist than a scientist'

A considerable amount of interest has recently been raised about the status of the professional engineer in Britain. This, for example, was one of the main contentions of the report of the British Association, but also of the series of newspaper articles earlier this year which went under the title "Why the British won't make it".

Contributors to that series implied very strongly—even if they did not argue explicitly—that the neglect of the engineer is much the same as the neglect of manufacturing. The overall impact of the series was to show that we are dependent on manufacturing for our economic well-being, so the country neglects the engineer at its peril.

These contentions are certainly valid. Yet many of those who have neglected the British engineer—and this neglect—have, over the years, themselves tended to remain uneducated about whom it is that has been

For many, the idea of engineering as a career is directly associated with physics and mathematics. After all, in the "two cultures" debate, physicists, mathematicians and engineers are all "scientists".

Those who build bridges and make cars have to know about the materials from which they are constructed; future engineers have almost always concentrated on the "science" side at school.

For the engineering product, if it is worth anything at all, is an artifact of use to those who will possess it. If it existed already, there is not much point in making it.

An alternative approach is to define engineering as a process based on physics, chemistry and mathematics, which uses these bodies of knowledge to produce its output.

Yet engineering is no different from sculpting or cooking in this regard. For the sculptor and the cook are as much bound by these laws as the engineer; each is a specialist who makes his product from available materials, using particular skills.

There is a fictional world about engineering, one which is reinforced by the fact that the engineering student at university goes off to the lab on a sunny afternoon, when all good "arts" people are getting a healthy tan.

In this, engineering is part of "technology"; and technology advances, as "applied science",

through "research", or at least through the "research and development" process.

Design, however, is the key process in engineering, at least in terms of conceptual difficulty; and this is as different from research as engineering is from science. For design is, obviously an art, in which skill is needed to be able to think in three dimensions, but to express ideas in two.

Design is a synthetic process whereby complex elements have to be fitted together; research is more analytical, concerned with penetrating the nature of things, and understanding fully why his new convenience works, only how it works.

Yet although design is the key process in engineering, production is the biggest in terms of concentration of resources. There is therefore good support for a contention that production is the most important single part of engineering and of manufacturing alike.

The production man is well known to be concerned with money and machinery, and it is no surprise to the outsider that the engineer should be concerned with machines and money. Yet an orientation towards people may come as a surprise.

Mike Fores

The author is a member of the government's engineering council, but all views expressed are personal.







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## OECD warns of need for Ottawa involvement

A major OECD report on education in Canada, now officially published, shows several months of work, points to a generally gloomy picture of progress made in the past 20 years, but it warns that Canada must now turn its educational priorities more carefully.

The report—by five external examiners—says Canada is "among the best educated nations in the world," but it criticizes the lack of planning for the future, the lack of cooperation between provincial ministries of education and above all the "murky" relationship between education and the Federal Government.

Officially, the examiners point out, there is no Federal presence in the area of educational policy, and the Federal government behaves—at least in public—as if there were none.

"In reality the educational policies of the Federal Government and the concomitants of that policy, cannot be overlooked. A considerable Federal presence in educational policy-making is indeed needed by the provinces and provinces as well as by the Federal Government, and as long as there are no over-riding principles attached to money coming from Ottawa.

"The examiners say that if it were possible all Canadian provinces would describe it as 'intolerable' and 'almost schizophrenic'. But to some extent, behaviour that strikes outsiders as elaborate make-believe may, in fact, be a necessary price, willingly paid to hold together a political confederation of disparate provinces."

The examiners assert, however, that there must be some national responsibility because in Canada, as in all modern states, education is a right of each citizen.

The lack of a Federal Department of Education, they add, has "created a kind of vacuum in educational policy" which has been invaded by Federal agencies responsible for "neighbouring" policy areas: manpower, regional development, economic, science, research and social and foreign policy and so on.

But they note that Canadians, because of their history and geography, prefer decentralized solutions. "Reforms in education are almost totally pragmatic, or are generally conceived and relying so heavily on the United States, British and French models, more or less adapted to Canadian conditions, that the

opportunity for party political conflict is, for all practical purposes, excluded."

But though a pragmatic approach worked in the past, the climate has now changed. "In the longer run, it will certainly be necessary to direct the upsurge of change in the direction of a cooperatively planned path, for there are signs that the impetus of reform is slackening, even in Canada."

"The sooner a workable path towards setting definite goals is found, the sooner acceptable criteria for making reform decisions will be discovered."

The report traces the rapid development of education. Of the 22 million Canadians, some 6,500,000—about 30 per cent—are now enrolled in some form of educational activity. International comparisons put Canada among the leaders in the development of postsecondary opportunities.

At the postsecondary level, the examiners say access has been helped by the abolition of provincial examinations, the introduction of students' grants and loans, the establishment of 146 community colleges and the unique system of CEGEPs (Colleges d'Enseignement Général et Professionnel) which they call "the most far-reaching development of the tertiary educational system."

But they note with some concern that the provinces have a very firm control over their universities and colleges, especially in Alberta and Quebec.

Talk in the provinces of "duplication of programmes" in universities and the "need for rationalization" is not convincing. "If the universities are not permitted to commit their own errors, even to a somewhat greater extent than other institutions, there would really be some reasons to doubt their right to exist."

But among universities themselves there is too little cooperation. They have not yet succeeded "in defining unambiguously their joint and common role in society, and making clear and persuasive their case for a particular degree of institutional autonomy and an unchanged claim on society's resources."

The report also touches on other issues now troubling higher education in Canada: the squeeze on research funds, the high proportion of non-Canadian lecturers, bilingualism and the constant argument about new ways of arranging Federal financing for universities.

## Record enrolment expected

It looks as though there will be a record number of students in American colleges and universities this coming year. At the same time more than ever are applying for financial aid to pay for their education.

The National Centre for Education Statistics predicts that 11,693,000 full-time and part-time students will enrol this autumn—an increase of 4.5 per cent on last year's total which itself was 9.4 per cent up on 1974 and took everyone by surprise.

The new 1976-77 total would mean half a million more students on campus, and could be welcome to colleges and universities struggling to fill their places.

Indeed, a number of universities have announced that they are limiting their intake because they cannot cope with more students, or because they have doubts about unlimited growth.

The University of Minnesota, one of the large state universities in

America, reckoned that if it did not control its intake it would have 67,000 students by 1981. The Board of Regents has hotly debated whether it should direct applications to neighbouring community colleges.

An association representing state universities forecast recently from a survey of 112 campuses that this year's student intake would be 3 per cent up on last year's, and 3.5 per cent up on 1974. The University of Chicago, for example, says its intake in 1976 will probably be 8 per cent higher than it was in 1975, the bulk of the additional students being women.

Some states have forcibly limited their universities' intake to keep them from spending more than the permitted. Federal universities are often limited by places in halls of residence and the amount of student aid available.

An American survey on the education of women throughout the world shows that they are still poorly represented in the tertiary sector

## Catching up on the campuses—but still a long way to go

Far from the corridors of international conference halls or the pages of the press, in places as disparate as village councils and the Ivy League, the decision has been made to enrol more girls in school, says a report of the education of women throughout the world.

In a survey of the education of women throughout the world it showed that enormous strides had been made in the past few years, especially in Africa and Asia, which were leading to rapid changes in women's role in society. Yet higher education remained one area where there was still a long way to go before women caught up with men.

Fifty years ago there were only 43 Egyptian girls attending secondary school. By 1971 there were over a million. Though often starting from a low level, since 1950 the female share of university enrolment has doubled in Japan, tripled in Nigeria, quadrupled in Pakistan and quintupled in Thailand. Between 1950 and 1974, the share of American bachelor's degrees granted to women doubled, reaching 45 per cent.

The report, *The Unfinished Assignment: Equal Education for Women*, is published by the Worldwatch Institute, a Washington-based organization.

It said more of the world's women could now read and write than ever before. The enrolment of females in primary and secondary schools had nearly caught up with males on every continent except Africa and Asia, where rapid gains were now under way.

Improvements were also being made in university enrolments, the report said. Since higher education was the training ground for people who would assume leadership positions, women's gains in the universities should have even greater implications for their roles in society than did earlier gains at the lower educational levels.

"Education lets women into the system," the author, Ms Patricia McGrath said. "Once there, they will shape the future, perhaps profoundly for men as well as women."

In some countries, such as Sweden, Canada and the United States—women had traditionally attained higher levels of education than men, as measured by the average number of years at school. In America more girls than boys have completed high school every year since the Civil War.

Looking at the field of technical training, the report said equal opportunity in the job market would not be realized without equal opportunity in vocational training. Limited training facilities for women reflected the social biases against women's pursuit of male-dominated occupations.

Societies in preparing girls for industry. In Hungary and the USSR, respectively, 17 per cent and 33 per cent of the girls enrolled in vocational courses were preparing for industry. This compared with less than 5 per cent in France, and less than 1 per cent in Argentina and the United States.

The greatest inequalities were among the working class. In Switzerland technical schools were closed to girls as late as 1967. Until recently women in France were excluded from many technical and vocational secondary schools. In the report said, while men in French technical schools could choose from more than 300 skills and trades, women were limited to 171.

In higher education there were no legal barriers, but there were few countries in which the share of female students reached 45 per cent of the advanced level.

In several countries female college students could be recruited only from a tiny qualified pool "often on the basis of difficult competition and sometimes in the face of insurmountable prejudices". But since the Second World War women's opportunities had expanded appreciably at this level. By 1970 United Nations statistics showed that women comprised the majority of students—55 per cent—in universities in the Philippines, Finland and the USSR. In most European countries, the number of female university students doubled or tripled between 1960 and 1968.

In Libya the female share of the university level had risen from a meagre 2 per cent in 1960 to 11 per cent in 1970, and in a number of African countries female enrolments had multiplied seven to 16 times.

However, women still comprised only a quarter to a third of total university enrolment in most of the Third World and their share of enrolment was between 41 and 50 per cent in only two out of seven major geographical areas.

In the United States between 75 and 100 per cent of the "well-qualified" students who did not go into college were women, the report said.

The availability of higher education to women did not always correspond with a country's level of economic development. The Philippines and Thailand, although less economically developed than the West, had a higher percentage of female university students than did the nations of West Europe.

In the United States, women's access to higher education had improved. A peak was reached in 1930 and again in 1944, when American women received more

steadily increasing for the next years, and was now about a fifth of the total enrolment.

Enrolment at Columbia University's business school was now about 35 per cent female. At Stanford University, the percentage of first-year women interested in engineering had turned sharply upwards: in the 1970s, from 1 per cent in 1950 to 6 per cent in 1975. A survey also showed that in 10 years the number of a third of medical students would be women, compared with the present 18 per cent.

Remuneration at the lower end of the teaching profession, which was below that of most other professions, was a major barrier to the primary grades and outside the formal school system, women held relatively few positions as teachers. Almost universal proportion of women teachers, declined with increasing rank.

The few exceptions to this of male ascendancy were again planned. In India, Bangladesh, Pakistan, females comprised a higher proportion of secondary school teachers than of primary



Japan: 12 per cent of university lecturers are female.

than half all bachelor's and master's degrees, then a sharp postwar decline set in as veterans swelled college enrolments.

With the war's end, educators, journalists and economists, fearing a glutted labour market, admonished women to leave their wartime jobs, and the press glamorized domesticity.

Not until 1968 did American women again receive the proportion of BA degrees they had earned in 1940. At that date the percentage of doctorate degrees still fell short of the share they had earned at the beginning of the depression.

Improvement in the female percentage of American PhDs had been steady, up from 10 per cent in 1950 to only 19 per cent in 1974.

In general, women continued to be over-concentrated in the humanities and social services, while male disciplines, particularly the sciences, were reserved for men.

But the entry of women into law schools in America had been

school teachers because in these societies cultural biases militated against the residence of female teachers in isolated rural places. Secondary schools, however, tended to be more centrally located where there was more acceptable accommodation.

In the Soviet Union, women accounted for one quarter of the doctoral degrees, and nearly half of all scientific workers, but only 10 of the senior professors of the Academy of Sciences were women. Nearly three quarters of Soviet school teachers were women, but only one quarter of the principals in the primary and secondary schools were.

In the United States the proportion of women in college and university teaching has declined from a peak of 30 per cent in 1940 to less than 25 per cent in 1970. Women comprised a meagre 8 per cent of full professional appointments, religious and community work were included, but a mere 1 per cent in the most famous universities. Ms McGrath quoted the observation that "the best way for a woman to become a college president is through the nursery".

Female percentage of the teaching force, by level, for selected countries, around 1970

| Country        | Prim | Sec | Univ |
|----------------|------|-----|------|
| India          | 25   | 30  | 15   |
| USSR           | 71   | 68  | NA   |
| USA            | 48   | 48  | 24   |
| Japan          | 55   | 54  | 21   |
| Brazil         | 90   | 54  | 21   |
| Nigeria        | 23   | 19  | 10   |
| Bangladesh     | 2    | 7   | NA   |
| Pakistan       | 24   | 27  | 23   |
| West Germany   | 56   | 33  | NA   |
| Mexico         | 61   | 20  | 13   |
| United Kingdom | 77   | 60  | NA   |
| Italy          | 68   | 41  | NA   |
| France         | 78   | 67  | 49   |
| Philippines    | 34   | 24  | 40   |
| Thailand       |      |     |      |

Source: UN Statistical Yearbook, 1974; and others.

India

## Major exam changes are planned

from A. S. Abraham

BOMBAY Following a series of teachers' strikes at several universities in India sponsored by the University Grants Commission, some major changes in the examination system for higher education are in the offing.

According to a UGC report on the subject, teachers favour evaluation of students through a continuous process of internal assessment, as against the present method of holding written external tests at the end of each academic year.

The report warns that internal assessment should not mean replacing one external test at the end of a course with a number of internal mini-examinations during it. A second reform is the introduction of a grading system on a seven-point scale in place of the present method of awarding marks for each question paper out of a maximum of 100.

The latter, says the report, has been found to be arbitrary, subjective, vague and inadequate. But grading should be "an open affair" to prevent both "unscrupulous" teachers from under or over-estimating the student's performance and affiliates from trying to give themselves more impressive results.

The changes, the report says, should be introduced in non-affiliated universities and postgraduate departments to begin with before extending them to affiliated colleges at the undergraduate level.

As far as these colleges are concerned, the report proposes, during the interim period, the introduction of a "question bank" to improve the existing examination system. This works as follows: a body of experts studies the syllabus, decides the number of questions to be set in a paper and divides the syllabus into an equal number of "units". Every question paper should try to include a question from each unit.

The questions to be asked eventually in the examination will be given to students well in advance to prevent cheating, leakage and similar malpractices and to make sure that intelligence, not memory, is tested. However, one-quarter of the questions should be from outside the bank so that the student learns to cope with such "surprises".

Italy

## Open access has 'not helped equality of opportunity'

from Patricia Clough

ROME Italy's policy of virtually unlimited university entrance has failed to make university education available to members of all classes, according to a Government-sponsored report.

Although the university population has increased by almost 150 per cent since entrance was opened 12 years ago to all who had completed their secondary education, students from workers or peasant origins were still in a small minority.

The report, by Consil (Centro Studi Investimenti Sociali), a government study centre, painted a dismal picture of overcrowded universities unable to cope with mass numbers of students parking places on the road to unemployment.

The only bright note was the appointment of 2,500 new professors last year as a result of which, still not reached, an "acceptable" student-teacher ratio.

The gravest criticism in the report was of the Government's failure to achieve its aim of equal right to study and true equality of opportunity in higher education.

The state grant system, the principal means for achieving equality, presented a sizeable margin of waste.

Australia

## Fresh anxieties over Canberra's attitude

from John Kirkcaldy

SYDNEY The report of the Commission on Advanced Education for the triennial 1977-79 has criticized the Canberra Government for giving enough support to its planning for education. The commission complained that the time from the publication of the government's financial "guidelines" this May to the deadline for the publication of the budget was too short for adequate planning. Under these guidelines, the commission was allocated \$100m in 1977.

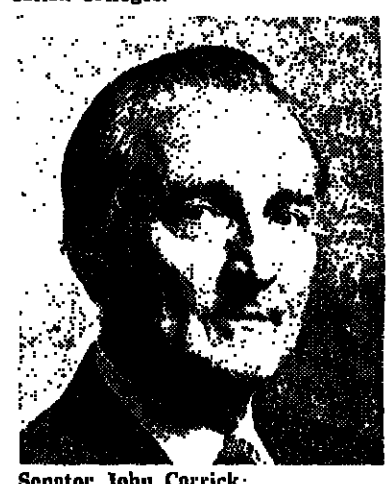
The Government is also criticised because a number of policy decisions still remain unresolved and these make the commission's work extremely difficult. The major uncertainty continues to be the government's attitude towards the merging of the universities and advanced education commissions. This was proposed by the previous Labour government before it was dismissed last November.

The Liberal and National Country parties opposed this measure at the time but are now thought to be reconsidering their attitude. For the moment, the precise funding arrangements for tertiary education in Australia remains more than a little uncertain.

After the announcement of the guidelines, the commission had only three months to prepare its report. There was also uncertainty, according to the commission, relating to the continuing three-year programme and the partial reintroduction of fees. In the past, detailed submissions had been considered from each state's coordinating authorities and from some individual colleges.

Members of the commission have usually visited a number of colleges around Australia. This time, however, there have been no visits and no detailed study of submissions.

Like the Universities Commission report, that of the Advanced Education Commission is anxious to retain the triennial funding principle. It sees the present triennial rolling system, whereby precise details are only released for the first year, as not being in the interests of forward planning. It would like to return to the old fixed triennial pattern of budgeting.



Senator John Carrick

West Germany

## Survey reveals much underuse of facilities

by Günther Kloss

At a time when the West German government is planning a major economic reform on the higher education sector they are also desperately looking for ways to increase the universities' student capacity and avoid waste.

The Federal Ministry of Education has now published figures showing that laboratory places in institutions of higher education are used for only 2.7 hours a day (or 33.4 per cent of the available time). Among the science subjects, physics was found to have the worst rate of utilization—1.7 hours a day for laboratory places in large teaching laboratories.

The Ministry has said that 50 to 60 per cent utilization would allow many thousands of extra students to study.

Another Ministry study, once again showed up a major weakness of the German university system: the total inadequacy of guidance and counselling to students, especially at the beginning of their course.

Almost 50 per cent of the sample of first-year students had premature departure on insufficient information and wrong planning during their course.

The study also revealed that 175 per cent of all graduates had changed their course during their time at university and that 75 per cent of graduates had studied over three semesters longer than the minimum required.

Indeed, in 1975, the average time for all students spent at institutions of higher education before getting their first degree was 6.5 years, compared to 4.3 years in 1965.

Sweden

## Poll result may hinge on young voters

from Mike Duckenfield

STOCKHOLM Despite demonstrations aimed at ending universal higher education, demands for the postponement of the forthcoming university reforms, education has failed to materialize as a key issue in the current general election campaign.

As the parties' efforts reached a climax this week prior to polling on Sunday, the Social Democrats, who have held power for an almost uninterrupted 44 years, were still fighting to whittle away the advantage held by the "three-party", non-socialist opposition since earlier this year.

The most recent polls give the centre-right parties a 4 per cent lead over the Social Democrats and Communists combined. Both the governing party's 950,000 members—more than twice as many as for all the other parties together—the Social Democrats are expected to close the gap substantially on Sunday and the final result is likely to be almost as close as that in 1973 when the socialist block won a 0.1 per cent victory.

The closeness of the contest has focused special attention on the 18-20 year-olds: a recent poll of 18-22 year-olds showed that although the Social Democrats' support was much the same as in 1973, that for the Communists had slumped, while the Conservatives and Liberals have gained in popularity.

While there has been little debate on educational issues, all parties have devoted lengthy sections of their manifestos and programmes to the subject, revealing a large measure of agreement.

Both the Social Democrats and the main opposition party, the Centre Party, favour recurrent education and emphasize their belief in the removal of formal requirements to allow free access to higher education for school leavers and adults alike.

Similarly, they both place equal value on theoretical and vocational studies, support measures to help immigrant children overcome linguistic problems and agree on the basic aims of education to communicate knowledge and skills so as

to promote independence of thought and the willingness to cooperate in society.

The major differences between the two main parties centre around the Social Democrats' view that trade unions should have the right to participate in school and university work. The Centre Party is less keen, though not totally opposed to this.

Further to the right, the Conservatives stress the need for smaller schools and classes and the retention of university degrees, abolition of which was suggested in the original UFS higher education reform proposals.

To the left, the Communists want the abolition of all graded school and university marks, the universal right to free nursery school education for under-sevens and the right of all language minorities to have all basic education up to the age of 16 in their native tongue.

The manifestos also make mention of research, again with a large measure of agreement. Both the Social Democrats and Centre Party say that research should be mainly applied and be geared to society's needs, society in its turn bearing the main responsibility for financing basic research.

Regarding educational research, the Social Democrats say it should focus above all on the social role of school, the needs of neglected groups and the special problems of adult education.

The Centre Party says research should promote security within society and single out environmental, peace and social science studies as priorities.

One of the three issues which have dominated the campaign—the other two were the Government's plans to expand its nuclear reaction programme and taxation—has been the Prime Minister Mr Olof Palme's pledge to give parents of all under-18s a paid year off work so that they can spend more time with their children.

The proposal is that present post-childbirth leave of absence lasting seven months should be supplemented by the equivalent of five more months, divided between parents and taken either in whole or in part in the form of reduced work hours.

Israel

## Students threaten widespread disruption over fees

from our correspondent

JERUSALEM After over a year of discussions and negotiations and a plethora of proposals ranging from 10,000 Israeli pounds downwards, university fees for 1976-77 have been fixed at 4,933 Israeli pounds (about £350), an increase of 83 per cent on 1975-76.

Student spokesmen have warned that the universities will not reopen next month if the fees are not reduced.

Last year the students fought in vain against the linkage of fees to the cost of living index. This year they are fighting for such linkage after the failure of their demand that fees should be graded according to the student's own income.

Linkage would mean fees of 3,800 Israeli pounds, an increase of just over 40 per cent on last year's fees. The Government, which has insisted upon linkage, argues that the economic crisis, which has led to severe cuts in higher education (and education in general), makes it impossible to raise 100m Israeli pounds from tuition fees over and above what linkage would provide.

The universities point to the fact that while their budgets for 1976-77

show a nominal increase of 6 per cent on the previous year, inflation of over 30 per cent is predicted. Moreover, between 1973 and 1976 their budgets fell by 40 per cent in real terms.

The unexpected happened when the Ministry of Education told the universities to fix the fees themselves. The Committee of Heads of Universities then arrived at 4,933 Israeli pounds.

The students offer a whole series of suggestions by which the universities could, in their opinion, reduce their costs: teaching loads should be increased; subsidies leave curtailed if not suspended or abolished; duplication in neighbouring universities abolished; a five-day instead of six-day working week; and the maximization of the use of buildings and equipment by adding a fourth term in the summer which would also shorten the time required to take a degree.

Although the Ministry says that 75m Israeli pounds are available for scholarships, grants and loans, student leaders fear a marked decrease in the numbers studying. At best, more students will have to devote more of their time to earning a living.

Switzerland

## Junior staff face big cutbacks

from GENEVA

A crisis of confidence is growing among junior staff throughout Swiss universities as the new academic year approaches. Hundreds of junior lecturers, teachers assistants (lecturers) and chefs de travaux (senior lecturers) are being dismissed when their contracts run out on September 30.

Noise of these posts carry tenure nor are holders even considered to be members of the teaching body. They are appointed for a maximum

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## Significant omissions

New Directions in Sociology  
edited by David C. Thoris  
David & Charles, £5.50  
ISBN 0 7153 7142 8

Both the contributors to this book and its contents are intriguing. Although the editor attempts to tie the whole book together by attaching some fairly broad labels to different perspectives and traditions within sociology, the contributors themselves are more difficult to label. The dustjacket solves the problem by labelling them all simply, if not modestly, as "sociologists eminent in their own fields", but mentions by name only the two American professors, Blalock and Catton, and one of the five Commonwealth contributors, A. Lally. It further states that Blalock and Lally "debate the approach which develops from the positivist tradition", but this is slightly misleading as neither of these authors enters into a debate with the other. In fact a real debate between the contributors would have been more instructive than what we have here, which is more like a debate with the ghost of positivism. Or could it be shadow boxing, as nobody admits to being a positivist and the much alleged Auguste Comte is mainly used as a punch bag, except by Catton, who actually suggests that Comte and Spencer were on to something important in trying to relate sociology to biology and other sciences.

The efforts of the editor to fit the various contributions into the context of an imaginary debate between various dichotomized traditions or perspectives never really succeeds because the contributors themselves escape the labels. If theorizing is a social action, are we to accept the meaning that the theorists themselves attach to their actions, or the meaning that the commentator attaches to them? According to some of the criteria set out by Thoris or Lally it would be appropriate to label Catton, Blalock, and even Mennell within the ethnological, as positivists and representatives of "academic sociology", and so resistant to phenomenological and radical influences in their theorizing and methodology. But as most sociologists all of them would be such labelling like the plague. And so a real debate never emerges.

Is it that there are no new directions being taken by positivist sociologists (who are made to sound as very unsophisticated lot) or did they at leasting in their tents when the editor sounded his trumpet? Granted that the eminence of one of the wings of that tradition, Talcott Parsons, refuses to fight on terms other than those of his own choosing, but surely all those American survey researchers who are criticized in this book have undertaken some explorations worth hearing about.

Sociology is much inclined to creating instant tradition (no doubt the American influence again), but the survey research tradition is not so old that it can be automatically excluded from a book on new directions in sociology. After all, symbolic interactionism is just as old and yet Robin Williams provides an interesting paper charting the different directions for various practitioners have taken. And Lévi-Strauss admits to some connections between Durkheimian positivist sociology and his own structural analysis, another important direction being explored by sociologists yet regrettably absent from this book. It is not possible to cover every new twist and turn in the winding paths followed by sociology, but what is left out is significant because it reduces confidence in the balance and comprehensiveness of the proffered bird's-eye view of current explorations.

Nevertheless, even if some significant areas are missing, and some are labelled too much in terms of polarities, the papers in this book offer a good guide to parts of sociology's ever-expanding territory. Let us hope the explorers will pursue a scorched earth policy as they press forward.

Kenneth Thompson

## BOOKS

### Breaking even

Gambling, Work and Leisure: A Study Across Three Areas  
by D. M. Downes, B. P. Davies, M. E. David and P. Stone  
Routledge & Kegan Paul, £8.25  
ISBN 0 7100 7708 4

A research project on gambling must have looked a pretty good academic bet in 1964. There were no other sociological contenders around and it simply seemed a question of investing a few thousand pounds in a survey and then after six years collecting a reasonable research profit and one or two far pay-offs from the theoretical side-bets.

But David Downes and his colleagues soon found that they were in a long-distance steeples chase rather than a six-furlong canter. The price of this volume only hints at the problems they must have encountered as the research project stretched out over 12 years of their lives. (Somebody else should write a book about the long sad story of the project, of key people leaving when the race was only half-run, of delays in computer analysis and publication.)

Even when the finishing line was finally reached, Downes and his co-authors had to face the fact that many of their sociological colleagues had been spending the intervening years criticizing the very nature of such endeavours—long empirical surveys based upon traditional interviewing techniques. The delays in publication certainly did not detract from the value of the work. It is difficult to feel involved in discussions about the impact of betting shops on British gambling (particularly when the average betting amounts are given in pounds, shillings and pence) or in the implications of the casino boom when such a boom was brought to a halt by a bill published in 1968. And certainly some of the methodological procedures do strike the reader as a little disingenuous after nearly a decade's exposure to interactionist and ethnomethodological critiques.

But, nevertheless, this final report does much to justify the researchers' original investment. It provides us for the first time with a great deal of hard information about the major forms of gambling in this country, about the different involvement of various social groups in such practices, and about the variables which influence this involvement. It gives the lie to the notion that we are becoming "a society of gamblers", undermines myths about the overconcentration of such practices in the working class, shows the strong link between lack of job-interest and

betting, and firmly establishes the importance of parental control, the most important result of the study. The old hypothesis about the fruit machines or even about the football pools (where gambling is laid to rest, as a time for middle-aged women).

This looks like rather a collection of findings which, when put together, provide a coherent and interesting picture of the ritual of gambling. However, this demonstration of the ritual of gambling is not a collection of findings which, when put together, provide a coherent and interesting picture of the ritual of gambling. However, this demonstration of the ritual of gambling is not a collection of findings which, when put together, provide a coherent and interesting picture of the ritual of gambling.

Downes and his colleagues select the copious material well. The schedules were designed to be as comprehensive as possible, and each chapter there is an attempt to provide a clear-cut interpretation. One of the eight theoretical points selected for discussion is the writer's (or perhaps one of the writers) opinion? How objective is the picture which emerges? The answer might well be that selection was essential to demonstrate a case being made, that objectivity is a myth to be discarded in the pursuit of knowledge, and that scientific method is a means to an end, not an end in itself. The book is organized round three major themes concerning magisterial justice: the materials of control, the machinery of control, and the modes of control. Yet there is no adequate discussion of the different stages of the preliminaries, of the trials themselves nor the legal rules, and some mistakes are made about these. The editors of this series in their introductory note remark how the sociology of law in Britain is immature and underdeveloped. It will have to do better than this to make a useful contribution to our knowledge of the work of the courts at magisterial level.

J. E. Hall Williams

## BOOKS

### Court rituals

Magistrate's Justice  
Pat Carlen  
Martin Robertson, £4.95  
ISBN 0 85520 121 5

Did not need a sociologist to tell us that the law can be an act. The old hypothesis about the fruit machines or even about the football pools (where gambling is laid to rest, as a time for middle-aged women).

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Social Research: Six Original Case  
Studies in Education and  
Behavioural Science  
edited by Martin Shipman  
Routledge & Kegan Paul, £3.25  
ISBN 0 7100 3320 3

The editor of this book commissioned its chapters because he was concerned that the public image of research seemed to be based on "an over-simplified view of the research process and an inadequate knowledge of the scientific methodology within the scientific community".

Editorial conclusion apart, each chapter gives an account of some influential educational research, of the origins of the study, its practical intellectual and personal problems, and how the results were received and used.

The studies, by J. W. B. Douglas, the Newsons, Juliette Ford, Colin Lacey, Joan Barker Lunn and R. R. Dale were all fairly closely related to current controversies in educational thinking, and could take on serious political implications. Amusing examples are given of ways in which the same findings were used to support opposite conclusions, and less amusing ones of the distortion of results or refusal to accept distasteful findings. The book is a very readable and effective follow from the difficulty of communicating complex findings to laymen, who have a natural desire for clearcut answers to questions on which decisions must be made, and one of the functions of this book as being to enlighten the layman about the complexity of the processes necessary to produce even a tentative and qualified conclusion. This is perhaps a little optimistic, since among those quoted as making ideological distortions of research results are some who should have known better.

Still, the cause is a good one, even when proper acknowledgment is made (as Shipman makes it) of the epistemological doubts now current, or exemplified in extreme form by Juliette Ford's chapter. But there seems to be some confusion of purpose in the idea that research consumers will treat research more seriously on its own terms if they are told how long a study took, how important it was to the author's personal development and how related to his deepest concerns. Technical appreciation of methods and empirical understanding of the research experience are both valuable, but they are not the same thing. It is by no means obvious that knowledge of the constraints, vicissitudes and personal meanings of research will lead to a just and deliberate weighing of its findings; it seems just as likely that it might lead to their dismissal as biased, however strongly author and editor protest that such factors are a normal condition of all research.

Whether or not the book is likely to fulfil its purpose in this respect, it is none the less of some interest. Different authors have construed their briefs differently, to an extent greater than seems likely to be due to the characteristics of their research: it is perhaps a pity that slightly more editorial pressure was not exerted. The most interesting points, apart from those specific to the design of particular projects, have to do with the ways in which key decisions were affected by a combination of practical constraints and personal interests and opportunities, and the way in which the research and its perception changed over time. Some more systematic documentation and discussion of the reception and use of findings would have been valuable, though the editor makes some interesting suggestions in his conclusion. He, and some of his authors, treat what they did or are doing as rather more novel than it is within sociology as a whole; perhaps this reflects their conception of the audience to which they are addressing their work. It is an interesting speculation how far British educational research is typical of social research more generally; I suspect that at least its relationship to its consumers is atypical, and this should be borne in mind in evaluating the book.

Jennifer Platt

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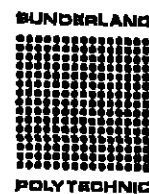
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### Lecturer Senior Lecturer Principal Lecturer PSYCHOLOGY

Applications are invited from experienced graduates for two posts in Psychology, to contribute to the teaching of the subject throughout the College, including a range of on-going and new degree courses.

Candidates should be prepared to offer one or more of the following specialisms to Honours Degree level: Developmental Psychology; Social Psychology; Industrial Psychology; Organisational Psychology.

Appointments, which will take effect from January 1st 1977 or as soon as possible thereafter, may be offered at Lecturer II, Senior Lecturer or Principal Lecturer level, depending on qualifications and experience.

Salary: Lecturer—£5,270-£5,493  
Senior Lecturer—£5,493-£5,695  
Principal Lecturer—£5,695-£5,897

Plus £312 per annum supplement for further particulars and application forms may be obtained from Mrs. Liddell, at the above address, to whom completed application forms should be returned by 15th October 1976.

This College is formed from an amalgamation of Colleges of Art, Commerce, Education, Maritime Studies and Technology.

Applications should be sent to the Director of Studies, Hull College of Higher Education, Collingham Road, Hull HU6 7RT.

This is a re-advertisement.

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## General Vacancies

### Technische Hogeschool Eindhoven Postbus 513 Eindhoven



### Reader in Philosophy

In the Department of Philosophy and Social Sciences at the Technische Hogeschool Eindhoven, Netherlands, the vacant readership (roughly equivalent to a readership) in Philosophy of the Exact Sciences is to be filled. Job description: Teaching courses on the methodological and philosophical foundations of natural and engineering sciences, mainly to students in physics, chemistry, electrical and mechanical engineering; directing students who graduate in this field, as well as conducting research; cooperating in teamwork with the other members of the division of philosophy. Qualifications: Publications showing scholarly competence; sufficiently thorough knowledge in philosophy and natural sciences for adequately fulfilling the tasks; good pedagogical abilities; willingness to assume administrative responsibilities; willingness to learn Dutch. Depending on experience the salary will be f. 5,237-5,495. The desired starting time is September, 1977.

Apply to Professor J. Wouda, Chairman of the Nominational Committee, who would also like to be apprised of possible serious candidates; for further information contact Dr. A. Sarason by mail or phone (tel. 040-482189 or 040-70-3248); both Department of Philosophy and Social Sciences, Technische Hogeschool Eindhoven, Eindhoven, The Netherlands.

## Polytechnics



### School of Management & Business Studies

### PRINCIPAL LECTURER IN ACCOUNTING

(Salary £5940-£7575)  
+ £312

to teach on and help with the continuing development of C.N.A.A. degree courses. The Division in Management Studies and other diploma courses.

Applicants must be members of one of the major accountancy bodies of the U.K.; hold a relevant higher degree, and have had particularly good industrial and/or commercial experience in the area of management accounting and financial planning.

The post is based in Harlow, Essex, but could involve some foreign travel connected with the development of materials for a particular area.

Experience of TIL/TEL is an essential requirement and a postgraduate qualification in the field of applied languages or education would be an advantage. Experience in the preparation of language teaching materials and/or curricula development is also highly desirable.

For further details and an application form write to or telephone:

Personnel Officer  
Longman Group Ltd  
Longman House, Burnt Mill  
Harlow Essex CM20 2JE  
Tel. Harlow 26721

### LECTURER II IN ACCOUNTING

(Salary £3279-£5493)  
+ £312

Applicants must be members of one of the major accountancy bodies in the U.K., and preferably hold a relevant degree. Good industrial or commercial experience is desirable.

Application forms returnable by 1st October, 1976, can be obtained with further particulars from the Personnel Officer.

Applications should be sent to the Director of Studies, Plymouth Polytechnic, Drake Circus, Plymouth PL4 8PU.

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Applications